

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0051179; AI 19472; PER20060001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.       **THE APPLICANT IS:** Louisiana Water Service, Inc.  
Magnolia Forest WWTP  
201 Holiday Blvd., Suite 150  
Covington, LA 70433
- II.       **PREPARED BY:** Ronda Burtch
- DATE PREPARED:** November 2, 2006
- III.      **PERMIT ACTION:** reissue LPDES permit LA0051179; AI 19472; PER20060001
- LPDES application received: January 18, 2006
- LPDES permit issued: August 1, 2001  
                                  LPDES permit expired: July 31, 2006

### IV.       **FACILITY INFORMATION:**

- A.       The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving the Magnolia Forest Subdivision.
- B.       The permit application does not indicate the receipt of industrial wastewater.
- C.       The facility is located off N. Military Road (LA Hwy. 1090) at the intersection of Fischer Drive in Slidell, St. Tammany Parish.
- D.       The treatment facility is an activated sludge wastewater treatment plant in extended air mode. The plant has an equalization and digester tank. Disinfection is by ultraviolet light.
- E.       Outfall 001

Discharge Location:   Latitude 30° 19' 50" North  
                                  Longitude 89° 44' 1" West

Description:           treated sanitary wastewater

Expected Flow:        477 homes x 400 gallons/day/home = 0.1908 MGD  
                          100 mobile homes x 300 gallons/day/home = 0.03 MGD  
                          12 One-bedroom apartments x 250 gallons/day/apartment = 0.003 MGD  
                          48 Two-bedroom apartments x 300 gallons/day/apartment = 0.0144 MGD

Total Expected Flow:   0.2382 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

**Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's**

plans by the Louisiana Department of Health and Hospitals and notification must be submitted to the LDEQ. Also, if the expected flow reaches or exceeds the design capacity of the facility, a permit modification may be required.

Type of Flow Measurement which the facility is currently using:

V-Notch Weir, Combination Totalizing Meter and Continuous Recorder

#### V. RECEIVING WATERS:

The discharge is into Gum Bayou, thence into the West Pearl River in segment 090202 of the Pearl River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 090202 of the Pearl River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 090202	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	Not Supported	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 090202 of the Pearl River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

#### VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 090202 of the Pearl River Basin, has been identified by the U.S. Fish and Wildlife Service (FWLS) as habitat for the Alabama (inflated) Heelsplitter, the Ringed Map (sawback) Turtle, and the Gulf Sturgeon, , which is listed federally as a threatened species. However, this type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

#### VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Office is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

Subsegment 090202, West Pearl River – from confluence with Holmes Bayou to Rigolets (includes east and west mouths) (scenic), is listed on LDEQ's Final 2004 303(d) List as impaired for mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Pearl River Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to other pollutants that were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

**Mercury**

The mercury impairment listed for subsegment 090202 applies only to those waterbodies specifically identified in LDEQ's Final 2004 Integrated Report, and not to the entire subsegment unless so specified. Because the discharge from this facility is not directly into the West Pearl River, mercury will not be addressed in permit development.

**Final Effluent Limits:**

**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>	20	10 mg/l	15 mg/l	Limits are set in accordance with the Areawide Policy for St. Tammany Parish for facilities of this size and treatment type.
TSS	30	15 mg/l	23 mg/l	TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia - Nitrogen	10	5 mg/l	10 mg/l	Limits are set in accordance with the Areawide Policy for St. Tammany Parish for facilities of this size and treatment type.
Dissolved Oxygen	N/A	5 mg/l	N/A**	Limits are set in accordance with the previous LPDES permit

\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

**Other Effluent Limitations:**

**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

**LPDES Permit No. LA0051179:** Issued: August 1, 2001  
Expired: July 31, 2006

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH (standard units)	---	---	2/month	Grab

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning November 2, 2004 and ending November 2, 2006 for this facility.

Date: September 12, 2005

Inspector: LDEQ

Findings and/or Violations:

1. Facility operating, running on generator.
2. No flooding, untreated water released at discharge point, slight odor.

Date: October 19, 2005

Inspector: LDEQ

Findings and/or Violations:

1. Facility operating, no significant damage, electricity on grid.
2. No flooding, nothing submerged, minor wind damage, no evident overflow.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that there have been no enforcement actions administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning July 1, 2004 through June 30, 2006 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
October 2004	DO, Monthly Avg.	6 mg/l	5 mg/l
November 2004	DO, Monthly Avg.	8 mg/l	5 mg/l
December 2004	DO, Monthly Avg.	8 mg/l	5 mg/l
July 2005	DO, Monthly Avg.	6 mg/l	5 mg/l
August 2005	DO, Monthly Avg.	6 mg/l	5 mg/l
November 2005	DO, Monthly Avg.	6 mg/l	5 mg/l
December 2005	DO, Monthly Avg.	6.7 mg/l	5 mg/l
January 2006	DO, Monthly Avg.	6.7 mg/l	5 mg/l
February 2006	DO, Monthly Avg.	6.4 mg/l	5 mg/l
March 2006	DO, Monthly Avg.	6.5 mg/l	5 mg/l
April 2006	DO, Monthly Avg.	5.9 mg/l	5 mg/l
May 2006	DO, Monthly Avg.	5.9 mg/l	5 mg/l
June 2006	DO, Monthly Avg.	6 mg/l	5 mg/l

- Please note that the DMRs for the following months were not submitted or were missing from the file: July – September 2004, January – June 2005, and October 2005.

## XII.

### ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Pearl River Basin scheduled for completion in 2009. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.2382 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.2382 \text{ MGD} \times 10 \text{ mg/l} = 20 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

#### Effluent Characteristics

#### Monitoring Requirements

	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

## XIII

### TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV**

**REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Louisiana Water Service, Inc., Magnolia Forest WWTP, January 18, 2006.